ORDINANCE NO. 2002-25-CM

AN ORDINANCE REQUIRING AND ESTABLISHING STANDARDS FOR DIGITAL SUBMISSION OF GEOGRAPHIC DATA

WHEREAS, the Indiana General Assembly, pursuant to I.C. 36-1-3-1 et. seq. has stated that it is the policy of the State of Indiana to grant counties the power that they need for the effective operation of government as to local affairs; and

WHEREAS, the Tippecanoe County Management Information Technology Services Department maintains Geographic Information Systems mapping data (hereinafter "GIS Data") with respect to certain land use information submitted to various departments of Tippecanoe County and submitted for recording in the office of Recorder of Tippecanoe County, including, without limitation thereby subdivision final plats, planned development final plats, parcelizations, easements and surveys as required by Indiana Administrative Code Rule 12, all for the use of the various county offices, commissions and departments and the general public; and

WHEREAS, The maintenance of the GIS Data in an efficient and accurate manner requires the establishment of uniform standards for the digital submission of such data; and

WHEREAS, the Board of Commissioners of Tippecanoe County desire to establish such uniform standards and require compliance therewith as a condition of acceptance and approval of surveys and other geographic information documents submitted to the various departments, offices and commissions of Tippecanoe County.

NOW, THEREFORE, BE IT ENACTED BY THE BOARD OF COMMISSIONERS OF TIPPECANOE COUNTY, INDIANA:

1. The Digital Data Submission Standards for Tippecanoe County as more fully set forth on Exhibit A, attached hereto and by reference made a part hereof, are hereby adopted as the uniform standards for the submission of such information to the various departments, offices and commissions of Tippecanoe County, Indiana.

2. As a condition of acceptance and prior to approval thereof, by the various departments, offices and commissions of Tippecanoe County, including, without limitation thereby the Surveyor's Office, Auditor, Drainage Board, Highway Department, Area Plan Commission, and Building Commissioner, all geographic information documents submitted to such offices, departments and commissions shall comply with the standards set forth on Exhibits A, B and C attached hereto.

3. This Ordinance shall be effective on the _____ day of _____, 2002.

PASSED AND ADOPTED this _____ day of _____, 2002.

BOARD OF COMMISSIONERS
OF TIPPECANOE COUNTY

_____
John L. Knochel, President

_____
KD Benson, Vice President

_____
Ruth E. Shedd, Member

ATTEST:

_____
Robert A. Plantenga, Auditor
of Tippecanoe County

Vote First Reading	Yes	No
Knochel	x	
Benson	x	
Shedd	Absent	
Vote Second Reading	Yes	No
Knochel		

Benson
Shedd

Robert A. Plantenga hereby certifies that the above ordinance was passed unanimously by a roll call vote of _____ on both first reading on the _____ day of _____, 2002, and on second reading on the _____ day of _____, 2002.

_____
Robert A. Plantenga, Auditor
of Tippecanoe County, Indiana

EXHIBIT A
TIPPECANOE COUNTY DIGITAL SUBMISSION STANDARDS

1. Geographic Information Documents (GID) means all documents submitted for approval or recording which graphically depict geographical information, including without limitation thereby, subdivision final plats, planned development final plats, parcelizations, easements (drainage, utility, road right-of-way, grants, fee simple, egress and ingress), and surveys as required by IAC Rule 12.

2. All Geographic Information Documents shall be submitted digitally, as well as in hard copy.

3. A full digital drawing plan is required. This file shall contain all graphic and text elements in standard format element types or fonts that can be read without third party software.

4. Digital data shall be mapped to real world units using horizontal control of North American Datum 1983 (NAD83) and vertical control of North American Vertical Datum 1988 (NAVD88), using Indiana State Plane Coordinate System, West Zone, expressed in U.S. Survey Feet.

5.

A. This data should also be tied to at least two points of geodetic controls in the county such as county section corners and quarter section corners for spatial reference. State Plane coordinates exist for most quarter section corners in Tippecanoe County. Control assistance can be obtained from the Tippecanoe County Surveyor's Office. It is a requirement that the controls used be referenced and shown in the plan drawing. Any other reference ties should also be symbolically annotated and indicated in the design file.

B. Any land survey information, such as basis of bearings and or any assumptions shall be submitted and annotated on the design file. This information is necessary for any digital post processing.

6. All base maps regardless of scale shall meet the standards defined in the United States National Map Accuracy Standards (NMAS), or the person submitting the data must provide the department with an explanation of why it is appropriate to deviate from the NMAS. However, post processed or corrected GPS coordinates or an appropriate survey standard is acceptable. The standards used shall be documented.

7. A digital copy of Tippecanoe County's design file, example layers and list of data definitions is available to be picked up from the County's GIS Department. This is attached herein as exhibit B.

8. If the party submitting the GID cannot use the layer scheme specified by the Tippecanoe County GIS Department, a complete list of layer names and associated descriptions of all delivered layers must accompany the digital file.

9. In the event the submitted GID file is not compatible with the County GIS, the submitting party must work with the County departments until the file is acceptable to the county GIS.

10. A digital file that accompanies the hard copy of a GID shall be delivered in one of the formats set forth in Table A1.

11. Digital files shall be submitted on one of the media types as shown in Table A2.

12. Digital files shall be labeled in a manner substantially conforming to the format set forth in Table A3.

13. The submission of metadata, i.e. data about the data, is highly recommended and is also very useful for evaluating data accuracy and acceptability. This information will be critical for the GIS

department to ensure rapid accurate incorporation of the maps and data in the Department's GIS layers. The suggested metadata template; Indiana GIS Metadata Profile is attached as exhibit C.

Table A1 Acceptable File Formats	
*.DXF	ASCII Drawing Exchange File
*.DGN	Microstation J Design File
*.DWG	AutoCAD Drawing File

Table A2 Acceptable Media Types
3.5" floppy diskette
CD ROM
Iomega zip disk (=<100mb)
Electronic file transfer via Email or FTP

Table A3 Blank Label for Media
FILE/S:
FORMAT:
DATE:
COMPANY:
REG NO.:
SIGNATURE:

EXHIBIT B
Tippecanoe County GIS Data Definitions and Standards

The Tippecanoe County GIS project is currently working on Bentley MicroStation GeoGraphics GIS software environment for graphic display and spatial analysis. The GIS model defines topology, assigns appropriate attribution, and customizes feature codes, including all map elements to be compiled. To expedite this process Tippecanoe County would like the existing data definitions and standards to be used for compiling features.

Data Standards and Definitions:

The information about feature descriptions and graphic parameters is divided into categories. The following categories have been created for Tippecanoe County. These current GIS layers may exist for any submittal in digital format.

Category Feature: Control
Category Feature: Drains
Category Feature: Hydrology
Category Feature: Parcel
Category Feature: Soils
Category Feature: Transportation
Category Feature: Topography
Category Feature: Zoning
For each category, a graphic database table is included with the following columns:

* Feature lists the feature name.
* Level is the MicroStation level number (from 1 to 63).
* Color is the color number for display.
* Style is the line type for display.
* Weight is the line thickness for display.
* Cell/font is the cell name that resides in the cell library (for a symbol) or the font name (for text).
* Size is the text height and width in drawing units.
* Space is the text offset (the distance between a line and its text) and the spacing between lines of text.

Table 4 Graphic Database for Control

Feature	Level	Color	Style	Weight	Cell/Font	Size	Space
GPS Control Point	9	3	0	1	SR_GPS	as=1	
GPS Control Text	10	3	0	1	1	8	4
Horizontal Control Point	3	3	0	1	SR_HOR	as=1	
Horizontal Control Point Text	4	3	0	1	1	8	4
Horizontal/Vertical Control Point	7	3	0	1	SR_HV	as=11	
Horizontal/Vertical Control Point Text	8	3	0	1	1	8	4
PLSS Section Corner	19	3	0	1	SECCOR	as=1	
PLSS Section Corner Text	20	3	0	1	1	10	40
PLSS Section Line	12	104	0	0			
PLSS Section Number	13	86	0	0	0	100	40
PLSS Section Polygon	12	101	1	1			
Vertical Control Point	5	3	0	1	SR_VER	as=11	
Vertical Control Point Text	6	3	0	1	1	8	4

Table 5 Graphic Database for Drains

Feature	Level	Color	Style	Weight	Cell/Font	Size	Space
Buffer Zone	30	2	0	4			
Drain Shed	32	1	5	5			
Drain Shed Text	33	3	0	3	1	20	10
Open Drain	26	3	0	5			
Open Drain Text	27	3	0	2	1	10	5
Subsurface Drain	24	3	0	5			
Subsurface Drain Text	25	3	0	2	1	10	5
Tile Drain Line	20	3	3	5			
Tile Drain Text	21	3	0	2	1	10	5
Urban Drain	22	3	0	5			
Urban Drain Text	23	3	0	2	1	10	5

Table 6 Graphic Database for Hydrology

Feature	Level	Color	Style	Weight	Cell/Font	Size	Space
Concrete Dam, Spillway	25	0	0	0			
Culvert	17	1	0	0			
Drainage Ditch Paved	27	0	0	0			
Drainage Ditch Unpaved	28	0	0	0			
Headwall	17	0	0	2			
Marsh, Swamp	13	7	0	0	DR_SWP	as=1	
River/Lake	11	7	rvrstm	1			
Stream	12	7	rvrstm	0			
Water Feature Text	18	7	0	1	23	10	5
Water Elevation Text	20	0	0	0	23	8	4

Table 7 Graphic Database for Parcel

Feature	Level	Color	Style	Weight	Cell/Font	Size	Space
Bldg Setback Line	16	2	3	0			
Bldg Setback Text	17	4	0	0	3	10	5
Corporate Boundary	31	10	4	4			
Corporate Boundary Text	34	10	0	0	2	10	5
County Line	32	5	6	8			
County Line Text	33	5	0	1	2	250	125
Easement	7	3	0	1			
Easement Text	7	7	0	0	3	8	4
Landhook Full	9	3	0	1	PA_HOF	as=1	
Landhook Half	9	3	0	1	PA_HOH	as=1	
Landuse Area	26	0	0	0			
Map Polygon	8	0	0	4			
Miscellaneous Text (large)	19	7	0	0	3	10	5
Miscellaneous Text (small)	19	7	0	0	3	6	3
Original Lot/Tract Line	13	22	2	1			
Parcel Acreage Text	4	4	0	0	3	8	4
Parcel Centroid	20	5	0	1			
Parcel Dimension Leader Line	5	0	0	1			
Parcel Dimension Text	5	0	0	0	1	6	3
Parcel Dimension Tic	23	0	0	1	tic	as=1	
Parcel Id Label	3	4	0	0	1	7	3.5
Parcel Line	2	2	0	1			
Parcel Polygon	8	0	0	1			
Political Township Line	29	3	3	1			
Political Township Text	30	3	0	1	2	750	375
Prec Polygon	45	129	1	1			
Pz	2	42	5	1			
Railroad ROW Line	6	7	0	2			
Reservation Boundary	35	10	6	2			
Reservation Boundary Text	36	10	0	1	1	12	6
Right Of Way Line	1	20	0	2			
Section Line	18	7	4	3			
Section Number	25	0	0	2	2	1000	500
Subdivision Block Number	15	51	0	0	2	25	5
Subdivision Boundary	12	5	3	3			
Subdivision Leader Line	14	5	0	0			
Subdivision Lot Number	15	22	0	0	2	10	5
Subdivision Name	14	5	0	0	2	15	15
Survey Township Line	27	5	3	3			
Survey Township Text	28	5	0	1	2	750	375
Vacated ROW Line	10	71	2	2			
Vacated ROW Text	11	71	0	1	3	8	4

Table 8 Graphic Database for Soils							
Feature	**Level**	**Color**	**Style**	**Weight**	**Cell/Font**	**Size**	**Space**
Soil Area	5	0	0	0			
Soil Boundary Line	1	22	0	1			
Soil Centroid	3	22	0	1			
Soil Label	2	22	0	1	1	40	20

Table 9 Graphic Database for Transportation							
Feature	**Level**	**Color**	**Style**	**Weight**	**Cell/Font**	**Size**	**Space**
Airfield Line	31	0	0	1			
Airfield Text	32	0	0	1	1	10	5
Bridge, Overpass	8	4	0	2			
Railroad Abandoned	10	101	gisstr2	1			
Railroad Abandoned Text	10	0	0	1	1	10	5
Railroad Active	9	5	{Rail Road}	1			
Railroad Active Text	9	5	0	1	1	10	5
Roadway Centerline	6	18	7	1			
Roadway Pavement Edge	8	136	0	1			
Roadway Text	7	4	0	1	0	10	5
Roadway Unpaved	8	120	3	1			
Weather Station	40	4	0	1	WTHR	as=1	

Table 10 Graphic Database for Topography							
Feature	**Level**	**Color**	**Style**	**Weight**	**Cell/Font**	**Size**	**Space**
3D Breakline	27	0	0	0			
DTM Spot Elevation	26	0	0	0	TO_SPT	as=1	
Index Contour	24	0	0	1			
Index Contour Depression	24	0	DEP	1			
Index Contour Hidden	24	0	3	1			
Index Contour Hidden Depression	24	0	HDEP	1			
Index Contour Text	22	0	0	0	23	8	Online
Intermediate Contour	23	0	0	0			
Intermediate Contour Depression	23	0	DEP	0			
Intermediate Contour Hidden	23	0	3	0			
Intermediate Contour Hidden Depression	23	0	HDEP	0			
Spot Elevation	26	0	0	0	TO_SPT	as=1	
Spot Elevation Text	25	0	0	0	23	8	4

Table 11 Graphic Database for Zoning							
Feature	**Level**	**Color**	**Style**	**Weight**	**Cell/Font**	**Size**	**Space**
Zoning Area	52	0	0	0			
Zoning Boundary Line	12	6	0	2			
Zoning Centroid	51	0	0	1			
Zoning Label	1	0	0	1	42	200	100

Category Feature Description: Control

* GPS Points. These points represent the location for a permanently monumented GPS observation point.

* GPS Point Text. This text identifies the point number and the elevation of the point.

* Horizontal Control Point. These points represent the location of a monument survey point used for horizontal aerial photography control.

* Horizontal Control Point Text. This text identifies the point number.

* Horizontal/Vertical Control Point. These points represent a survey point used for both horizontal and vertical aerial photography control.

* Horizontal/Vertical Control Point Text. This text identifies the point number and the elevation of the point.

* Public Land Survey System (PLSS) Section Corner.

* PLSS Section Corner Text.

* PLSS Section Line.

* PLSS Section Number.

* PLSS Section Polygon.

* Vertical Control Point. These points represent the location of a monument survey point used for vertical aerial photography control.

* Vertical Control Point Text. This text identifies the point number and points elevation.

Category Feature Description: Drains

* Buffer Zone. This line represents a 75-foot buffer area on each side of the drain.

* Drain Shed. This line represents the high side of an area where water flows to specific drains.

* Drain Shed Text. This text represents the name of the drain shed.

* Open Drain. The open drain feature includes all regulated open waterways, creeks, streams, and ditches and will be graphically represented as the centerline of the feature.

* Open Drain Text. The text represents the name of the open drain.

* Subsurface Drain. The subsurface drain feature represents drain tile that underlays the curb of new developments. This tile is connected sporadically to the urban drains at subsurface drain risers or curb inlets.

* Subsurface Drain Text. The text represents the name of the subsurface drain.

* Tile Drain Line. The tile drain feature represents rural drainpipes that are part of a regulated drain.

* Tile Drain Text. The text represents the name of the tile drain.

* Urban Drain. The urban drain feature represents the drainpipes that make up the storm sewer system of an urban or suburban development.

* Urban Drain Text. The text represents the name of the urban drain.

Category Feature Description: Hydrology

* Concrete Dam, Spillway. This feature represents the pavement perimeter of large concrete dams and spillways.

* Culvert. The culvert cell represents the ends of drainage pipes, as seen on the aerial photography, where no head walls or end walls are apparent.

* Drainage Ditch Paved. The drainage ditch defines the edges of paved drainage areas. These include open drainage ditches and large aprons around drainage structures, such as catch basins and retention basins.

* Drainage Ditch Unpaved. The drainage ditch lines represent the natural flow of storm water. This includes small streams as well as grassy swells.

* Headwall. Headwalls and end walls are represented with this feature.

* Marsh, Swamp. This cell is placed consistently within low areas that may hold water.

* Stream, River, Lake. The drainage feature will be captured photogrammetrically and will represent all rivers, streams, creeks and drainage ditches.

* Water Feature Text. This text is placed parallel to and adjacent to each hydrology feature to indicate its name.

* Water Elevation Text. This text represents the elevation of water bodies and is placed in the center of the water body.

Category Feature Description: Parcel

* Bldg Setback Line.

* Bldg Setback Text.

* Corporate Boundary. The corporate boundary defines the perimeter of each incorporated jurisdiction in the county. To be complete this feature must be displayed with the political township and county boundaries.

* Corporate Boundary Text. The corporate boundary label represents the political jurisdictions and will be placed parallel to and adjacent to the corporate boundary. This text will be all caps and spelled out.

* County Line. The county line represents the limits of the county and this project.

* County Line Text. The county line label will be placed parallel and adjacent to the county boundary. This text will be all caps and spelled out completely.

* Easement. The ingress/egress easement lines represent the limits of private ingress/egress easements and will appear inside the boundaries of private property. This feature must be displayed with right-of-way lines and parcel lines to be complete.

* Easement Text. The easement text feature identifies the ingress/egress easements. This text will be in the visual center of the easement.
* Landhook Full/Half. The landhook symbol is used to indicate common ownership of parcels separated by a roadway, river, railroad, or another parcel. This symbol resembles the number 7 and is placed at opposite sides of a feature that divides the parcel.

* Landuse Area.

* Map Polygon.

* Miscellaneous Text (large/small). The miscellaneous label will label such areas as cemeteries, parks, schools, and so on. This text will be placed at an angle of zero and in the visual center of the parcel.

* Original Lot/Tract Line. The original lot/tract line defines the location of an original subdivision lot line, according to a tract line remaining as a result of a parcel combination. This line does not define ownership boundaries. It shows the history of a parcel and its associated platted information.

* Parcel Acreage Text. This parcel acreage text feature represents the size of a tract parcel as it is recorded in the county records. In the case of small parcels the acreage will be placed outside and adjacent to the parcel as a note.

* Parcel Centroid. The parcel centroid feature maintains the link between graphic and non-graphic data. This feature is actually a zero length line to which the database is linked. It will reside in the geographic center of each parcel.

* Parcel Dimension Leader Line. The leader line will be used in congested areas where text elements will not fit. The text will be placed in an open area and the leader will point to the element or area that it represents.

* Parcel Dimension Text. The parcel dimension text represents the distance, in feet, of ownership along a parcel feature. Depending on the origin of the data, dimensions may differ on opposite sides of the same line. This text will be placed parallel to and adjacent to the line that it defines. All of the lines will be labeled with the proper dimension.

* Parcel Dimension Tic. The parcel dimension tic will be placed at the beginning and end of curved segments or other parcel vertices where it is difficult to see the point to where a dimension describes.

* Parcel Id Label. The key number is the sole link between the county's tabular database and the geographic parcel. This text will be placed in the visual center of each parcel the parcel centroid will remain in the geographic center of the parcel.

* Parcel Line. The parcel boundary defines the perimeter of each individual parcel. This feature - when combined with ROW lines, railroad ROW lines, and river/stream - will depict the entire parcel coverage.

* Parcel Polygon.

* Political Township Line. The political township line represents the boundary between each township in the county. The feature must be displayed with the corporate and county boundaries.

* Political Township Text. The political township text will be placed parallel to and adjacent to the township boundary and be the names of the political jurisdictions separated by the political township line.

* Prec Polygon.
* Pz. Parcelization line.

* Railroad ROW Line. The railroad ROW represents the limits of railroad. The feature will be an integral part of the parcel coverage and must be displayed with the other parcel features.

* Reservation Boundary.

* Reservation Boundary Text.

* Right of Way Line. The ROW line represents the limits of street and roadways. This feature represents the limits of public access and will be complete when displayed alone.

* Section Line. The section line defines the edge of a 1-mile section of land and must be displayed with the survey township lines to be complete.

* Section Number. The text represents the associated section.

* Subdivision Block Number.

* Subdivision Boundary. The subdivision boundary represents the perimeter of each subdivision or plat. The limits of subdivision or plat will be complete when displayed alone.

* Subdivision Leader Line.

* Subdivision Lot Number. The subdivision lot number represents the lot number of a lot within a particular subdivision. The text will be placed parallel to the rear lot line.

* Subdivision Name. The subdivision label will list the subdivision/plat name. It will be all caps and placed across the subdivision while not obscuring other parcel text.

* Survey Township Line. The survey township line represents the 6 mile x 6 mile township grid as defined in the original land survey. Each grid cell contains 36 1-square mile sections of land. This feature will be completed when displayed alone.

* Survey Township Text. The survey township text will be placed parallel to and adjacent to the survey township line. Each survey township will be labeled with its name.

* Vacated ROW Line. The vacate ROW line represents the past existence of a public ROW that has reverted back to private ownership. This feature will be complete when displaying with the ROW and parcel boundaries.

* Vacated ROW Text. The vacated ROW text will contain any pertinent information concerning the vacation of the particular ROW. It will be placed parallel to and inside of the vacated ROW.

Category Feature Description: Soils

* Soil Area. The soil area is the polygon of each soil type.

* Soil Boundary Line. The soil boundary line will define the areas of varying soil type.

* Soil Centroid. The soil centroid will be located within each polygon and be the linkage to the non-graphic soil type.

* Soil Label. The soil label will be placed inside each soil area to designate the area's particular soil type.

Category Feature Description: Transportation

* Airfield Line. The airfield line represents runways, parking aprons and taxiways.

* Airfield Text. The airfield text represents the name of the airfields. All named airfields will be labeled.

* Bridge/Overpasses. A bridge/overpass will be represented as a closed polygon defining the limits of the bridge. This feature will define all bridges and overpasses attached to public roadways regardless of whether they span drainage features or other roadways.

* Railroad (Abandoned). The railroad (abandoned) will represent a visible railroad that appears to have been abandoned or the remnants of where the tracks have been removed.

* Railroad (Abandoned) Text. The railroad (abandoned) text represents the name of the railroad and will placed on all railroad (abandoned) features.

* Railroad (Active). The railroad (active) will represent all railroads that appear to be active. The feature will represent the centerline of the track.

* Railroad (Active) Text. The railroad (active) text represents the railroad name and will be placed on all railroad (active) features.

* Roadway Centerline. The roadway centerline of each traveled roadway will be digitized along the visual centerline of the pavement.

* Roadway Pavement Edge. The roadway pavement edge feature represents the edges of all public roadways, including curbs and pavement edges. This feature will be complete when displayed with the bridges and overpasses.

* Road Text. The roadway text represents the name of roadways and will placed on all named roads.

* Roadway Unpaved.

* Weather Station. This feature represents the weather spotters' stations within the County.

Category Feature Description: Topography

* 3D breakline. The 3D breakline feature is placed by photogrammetric means along noticeable changes in terrain such as top slope, the centerline of a ditch, a road edge, and so on. This feature is not intended for graphic display.

* DTM Spot Elevation. The DTM spot elevation is a specific elevation within the DTM. They are used in conjunction with 3D breaklines to generate contours and other volumetric calculations. This feature is not intended for graphic display.
* Index Contour. The index contour feature represents terrain elevations at an interval of ten feet and will be compiled to meet NMAS. The contours will be continuous throughout, not broken or clipped for any reason or along any feature, such as buildings, bridges, retaining walls, and so on.

* Index Contour Depression. The index depression contour features will be used to define low areas that may hold water or be prone to flooding.

* Index Contour Hidden. The hidden index contour feature is as listed above and will be displayed in areas of dense ground cover where the ground may not be seen, rendering the contours not as accurate.

* Index Contour Hidden Depression. The hidden index depression contour will be used when both of the previously stated conditions occur.

* Index Contour Text. The index contour text will be placed consistently throughout the file to indicate the elevation of the particular contour. This feature will be vertically centered on the line and parallel to the line it represents.

* Intermediate Contour. The intermediate contour represents terrain elevations at an interval of two feet and will be compiled to meet NMAS. The contours will be continuous throughout, not broken or clipped for any reason or along any feature, such as buildings, bridges, retaining walls, and so on.

* Intermediate Contour Depression. The intermediate depression contour feature will be used to define low areas that may hold water or be prone to flooding.

* Intermediate Contour Hidden. The hidden intermediate contour is as listed above and will be displayed in areas of dense ground cover where the ground may not be seen, rendering the contour not as accurate.

* Intermediate Contour Hidden Depression. The hidden intermediate depression contour feature will be used when both of the previously stated conditions occur.

* Spot Elevation. A spot elevation symbol, with associated text, will be placed randomly to supplement the contours in the definition of the shape and slope of the terrain.

* Spot Elevation Text.

Category Feature Description: Zoning

* Zoning Area. The zoning are represents the polygon containing each zone classification.

* Zoning Boundary Line. This line feature represents the limits of the zones that will be digitized from existing source documents.

* Zoning Centroid. The zoning centroid will be located within each polygon and be linked to the non-graphic database.

* Zoning Label. This zoning label will be placed inside each zone area to designate that areas particular zone classification.

EXHIBIT C

Indiana GIS Metadata Profile
(for FGDC Minimally Compliant Metadata)

☺ DON'T BE OVERWHELMED BY THIS WORKSHEET: The point is to get you started with documenting your data set.

☺ THIS WORKSHEET REPRESENTS SOME BARE-BONES INFORMATION needed to produce a sharable/searchable/retrievable metadata catalog entry. If you wish to document more information about your data set(s), please make a note of it – I can almost guarantee there's a place for it in the fully-compliant metadata.

☺ THIS IS ONLY A WORKSHEET: the information you provide here can be transferred to an FGDC computer format at a later date.

☺ THE **INDIANA GEOGRAPHIC INFORMATION COUNCIL RECOMMENDS FULLY COMPLIANT METADATA** in accordance to the FGDC Content Standard for Digital Geospatial Metadata. The Indiana GIS Metadata Profile provides guidance for users who cannot otherwise develop fully compliant metadata. For more examples, you can preview the Indiana GIS Initiative Metadata Tool Kit (www.state.in.us/ingisi) and for instructions on completing fully compliant metadata. Contact The Polis Center at IUPUI regarding training opportunities 317-274-8400.

Name of an organization or individual that developed the data set

8.1 Originator of the data set: ❒ Unknown *or*

Free date

8.2 Publication Date: ❒ Unknown ❒ Unpublished *or*

The name by which the data set is known

8.4 Title: _____

8.6 Geodata Presentation Form: ❒ Atlas ❒ Audio ❒ Database ❒ Diagram ❒ Document ❒ Globe ❒ Graph ❒ Image ❒ Map ❒ Model ❒ Multimedia presentation ❒ Profile ❒ Remote-sensing image ❒ Section ❒ Spreadsheet ❒ Table ❒ Video ❒ View ❒ Other _____

Use a URL to hyperlink to a data set for Internet download, or link to your organizations web page, if applicable

8.7 Online linkage: _____

A brief narrative summary of the data set

1.2.1 Abstract:

_____

A summary of the intentions with which the data set was developed

1.2.2 Purpose: ❒ Not Applicable ❒ Unknown *or*

_____

Single date/time OR multiple dates/times OR range of dates/times

1.3 Time period of content:

1.4.1 Progress: ❒ Complete ❒ In work ❒ Planned

"Ground condition" is used for primary data sources such as air photos, field collected data and remote sensing; "Publication date" is used for secondary sources of data

1.3.1 Currency of the data: ❒ Ground Condition ❒ Publication Date

1.4.2 Maintenance and update frequency: ❒ Continually ❒ Daily ❒ Weekly ❒ Monthly ❒ Annually ❒ Unknown ❒ As Needed ❒ Irregular ❒ None Planned

1.5 Spatial extent of the data set: *Expressed by latitude and longitude values*

West Bounding Coordinate_____ *or* ❒ **-88.25**
-180.0 <= West Bounding Coordinate < 180.0 *Indiana*

East Bounding Coordinate_____ *or* ❒ **-84.56**
-180.0 <= East Bounding Coordinate <= 180.0 *Indiana*

North Bounding Coordinate_____ *or* ❒ **41.92**
-90.0 <= North Bounding Coordinate <= 90.0 *Indiana*

South Bounding Coordinate_____ *or* ❒ **37.59**
-90.0 <= South Bounding Coordinate <= 90.0 *Indiana*

1.6.1.1 Theme keyword thesaurus:
❒ None *or*
_____

1.6.1.2 Theme keywords:
_____
_____
_____

Restrictions and legal prerequisites for accessing the data set. These include any access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the data set.

1.7 Access Constraints: ❒ None *or* _____

Restrictions and legal prerequisites for using the data set after access is granted. These include any access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the data set.

1.8 Use Constraints: ❒ None *or* _____

The denominator of the representative fraction on a map (for example, on a 1:24,000-scale map, the Source Scale Denominator is 24000)

2.5.1.2 Source Scale:

❒ Not Applicable ❒ Unknown ❒ 1:_____

The estimate of the accuracy of the horizontal coordinate measurements expressed in (ground) meters

2.3.1.2.1 Horizontal Positional Accuracy Value:

❒ Not Applicable ❒ Unknown ❒_____

4.1.4.1 Horizontal Datum Name:

❒ Not Applicable ❒ Unknown

❒ North American Datum of 1927 (NAD27)

❒ North American Datum of 1983 (NAD83)

4.2.1.1 Altitude Datum Name:

❒ Not Applicable ❒ Unknown

❒ National Geodetic Vertical Datum of 1929 (NAV29)

❒ National Geodetic Vertical Datum of 1988 (NAD88)

For maps, what map projection or grid coordinate system are you using?

4.1.1.1 Map Projection Name:

5.1.1.1 Entity Type: ❒ Point ❒ Line ❒ Polygon ❒ Raster ❒ Route ❒ Grid ❒ Other _____

Contact person name AND/OR Organization *Position (if applicable)*

6.1 Distributor:

Street *City* *State* *Zip code*

Phone *Fax (if applicable)* *E-mail (if applicable*

6.3 Distribution Liability: ❒ None *or* _____

In what formats are the data available? The format version is important to the user (eg., ArcInfor v. 7.0.4 export). Note more information can be provided with more complete metadata.

6.4.2.1.1 Digital Form -- Format Name:

Are the data available for free or is there an associated cost?

6.4.3 Fees: ❒ None *or* _____

The date that the metadata were created or last updated

7.1 Metadata Date:

Contact person name AND/OR Organization *Position (if applicable)*

7.4 Metadata Contact:

Street *City* *State* *Zip code*

Phone *Fax (if applicable)* *E-mail (if applicable*

7.5 Metadata Standard: **FGDC Content Standard for Digital Geospatial Metadata**

7.6 Metadata Standard Version: **2.0**